# ST 99-0023-PLR 05/24/1999 POLLUTION CONTROL FACILITIES

This letter advises whether some of the equipment used at a landfill qualifies for the pollution control facilities exemption. See 86 III. Adm. Code 130.335. (This is a PLR.)

May 24, 1999

## Dear COMPANY:

This Private Letter Ruling, issued pursuant to 2 III. Adm. Code 1200 (see enclosed), is in response to your letter dated October 30, 1998 which was received by our office on December 1, 1998, and your follow-up letter of May 21, 1999. Review of your request for a Private Letter Ruling disclosed that all information described in paragraphs 1 through 8 of subsection (b) of the enclosed copy of Section 1200.110 appears to be contained in your request. This Private Letter Ruling will bind the Department only with respect to COMPANY for the issue or issues presented in this ruling. Issuance of this ruling is conditioned upon the understanding that neither COMPANY nor a related taxpayer is currently under audit or involved in litigation concerning the issues that are the subject of this ruling request.

In your letter, you have stated and made inquiry as follows:

We are requesting a letter ruling to determine whether tangible personal property purchased by our client, COMPANY, qualifies for the pollution control facilities exemption provided in Section 130.335 of the Illinois Administrative Code.

### **Facts**

The Company is a waste management company that operates in the non-hazardous solid waste segment of the waste management industry. The Company owns landfills throughout the United States; several are located in Illinois. The landfills in Illinois accept municipal and commercial waste, construction and demolition debris, and some special wastes.

There are several critical elements in a landfill: a bottom liner, a leachate collection system, the cover, and the gas collection system. Landfills produce contaminated water called leachate. The leachate must be removed to prevent contamination of ground water and other natural resources. In order to remove the leachate, which seeps to the bottom of the landfill, the Company has installed a leachate collection system. The bottom of the landfill is sloped, and pipes laid across the bottom capture the leachate as it accumulates. The floor of the landfill is required to be lined with recompacted clay and a plastic film called high-density polyethylene (HPDE). The leachate is then pumped from the landfill and treated.

In addition, the landfill contains a cover to keep water out of the landfill, and thus prevent further leachate formation. The cover consists of two layers that work together to keep water from entering the landfill. The first layer consists of topsoil needed to help stabilize the second layer of the cover. The second layer contains recompacted clay to prevent rain from entering. This cover must be maintained so that moisture cannot enter the landfill, thus minimizing leachate generation and preventing erosion into adjacent waterways.

In addition to leachate, these landfills also produce gas. Landfill gas, which is produced by the decomposition of garbage and other organic materials, consists primarily of methane, carbon dioxide and miscellaneous volatile materials. The gas contains compounds, which if released into the atmosphere would cause air pollution. Therefore, landfill operators must install gas collection systems to control gas generated by the landfill.

Due to the harm that would be caused through leakage of leachate and 'landfill gas' it is necessary to install various systems to prevent the release of contaminants into the environment. These systems consists not only of the liner, cover, leachate collection and gas collection systems, but also a leachate storage, leak detection system, monitoring system, a surface water control system, a landfill gas treatment system, and a gas condensate management system. These systems work together to prevent pollution of the atmosphere, groundwater, and surface water. Without them there would be a high risk of harm to human, plant and animal life, in addition to property damage.

The Company's pollution control system is made of several component parts. The following is a list of these components and a brief description of their role in reducing air and water pollution:

- HDPE geomembrane The geomembrane is used to prevent contaminants from being released into the air and groundwater. Specifically, the geomembrane reduces the amount of leachate generated, and prevents landfill gas from escaping.
- Geosynthetic Clay Liner (GCL) The GCL prevents contaminants from being released into air and ground water, and allows the Company to collect and treat leachate.
- Soil-bentonite slurry wall The wall is used to prevent contaminants from escaping the landfill site.
- Geonet and Geocomposite drainage material The drainage material is used to collect leachate produced from the waste. In addition, this material serves to provide an early warning of leakage.
- Geotextile fabric The geotextile fabric is used in the Company's final cover system as a filter to protect the components of the system.
- = Geogrid The geogrid used in the Company's final cover system, helps stabilize the landfills waste areas.
- = Perimeter berm and barrier system These materials form the base of the landfills perimeter features. These materials are required in order to prevent contamination of surface water. These materials prevent contamination by diverting surface water from the fill area.

- Pipes The Company uses several types of pipes at the landfill. These pipes include HDPE leachate collection and conveyance pipes, leachate re-circulation pipes, leachate cleanout pipes, gas extraction well pipes, gas header pipes, and condensate conveyance pipes. The pipes are used to remove leachate, landfill gas, and gas condensate from the landfill. In order for the pipes to remove these contaminants several items must be used with the pipes. These items include pipe bedding materials, pipe fittings, well heads, valves, flow meters, and monitoring devices.
- Leachate collection system This system collects leachate from the landfill and protects the geosynthetic lining system. The system includes a control trench that collects leachate at the bottom of the landfill. The control trench minimizes groundwater pollution. The system also uses pumps, and electrical and pneumatic controls to remove leachate from the liner system and the control trench to prevent leachate from leaking into groundwater.
- = Lift Stations The lift stations are used with the leachate collection system to transfer leachate to the leachate storage tanks.
- Leachate storage tanks The storage tanks are used to store leachate collected from the leachate collection system. The tanks are required in order for the leachate to be transported safely to the water treatment plant for treatment and disposal.
- Landfill gas flare system The gas flare system is used to combust and treat landfill gas. This system reduces the amount of contaminants released into the air, and thus minimizes air pollution.
- Landfill gas condensate knockouts/driplegs, and storage tanks These items are used to remove and store landfill gas condensate collected from the landfill. The system uses sumps/vessels, backfill material, pumps, valves, flow meters, and monitoring devices to remove the landfill gas from the landfill. Without these items landfill gas condensate would escape through the liner and contaminate the atmosphere.
- Storm water cover and water basin system The cover material is used decrease leachate generation by preventing water from getting into the landfill. The basin is used to reduce sediment and silt loading and prevent leachate from contaminating surface water. Specific items used with the system include culverts, concrete structures, risers, outlet structures, and riprap.
- = Erosion control materials The erosion control materials are used to stabilize soil and to prevent the contaminants from polluting water. These materials include topsoil, seed, fertilizer, mulch, silt fence, check dams, concrete ditch lining and erosion matting.

- = Groundwater, leachate, and gas monitoring wells The wells are used to insure that leachate and other contaminants are not released into groundwater, surface water, or the atmosphere.
- = Litter control fences The litter control fences works in combination with the other systems to prevent contaminants from polluting the area surrounding the landfill.

In addition to the Company's pollution control system components listed above, other specific items of tangible personal property are required in order for the system to reduce air and water pollution. These items are used in the construction and operation of the landfill as follows:

- Bulldozers The bulldozers are used to cover waste material, and to grade clay liner in order to satisfy the Illinois Environmental Protection Agency's (IEPA) requirement that clay be graded to a specific level.
- = Excavator The excavator is used along with the bulldozers to cover waste material deposited in the landfill and provides on-site clay for the liner systems.
- = Trucks The trucks are used with backhoes and scrapers as part of the final cover system to haul excavated material such as clay from one location at the landfill to another.
- Compactors The compactors are used to compact waste material and to minimize liquid infiltration thereby reducing the formation of leachate.
- Loader The loader is a front-end loader that is used to load, unload, and deploy synthetic materials and stone for the leachate and gas removal systems.
- = Tractors The tractors are used for mowing and seeding of the top layer of the landfill cover as part of the final cover system. The tractors help maintain the landfill cover thereby preventing water infiltration.
- Water Truck The water truck is used to moisten clay liner used at the bottom of the landfill and on the bottom layer of the landfills cover and to prevent dust from getting into the air and water.
- = Sweeper The sweeper is used to collect dirt and other debris, which, if left uncollected could become airborne and would cause air pollution.
- = Pumps The pumps are used in conjunction with the leachate control system, to pump leachate from the landfill.
- Compressor The portable compressor is used to operate the water and leachate pumps.

= Flares and Blowers - The flares and blowers are used to combust the landfill gas to prevent the gas from migrating into the air.

Although the Company has paid the tax that was imposed on the purchase of the above items, the equipment is used to operate and maintain the system designed to prevent the release of contaminants into the environment.

## Relevant Law

- 1. 'Sale at retail' means any transfer of the ownership of or title to tangible personal property to a purchaser, for the purpose of use or consumption, and not for the purpose of resale... 35 ILCS 120/1.
- 2. 'Pollution control facilities' means any system, method, construction, device or appliance appurtenant thereto sold or used or intended for the primary purpose of eliminating, preventing, or reducing air and water pollution as the term 'air pollution' or 'water pollution' is defined in the 'Environmental Protection Act' enacted by the 76<sup>th</sup> General Assembly, or for the primary purpose of treating, pretreating, modifying or disposing of any potential solid, liquid or gaseous pollutant which if released without such treatment, pre-treatment, modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property. 35 ILCS 120/1a.
- 3. Notwithstanding the fact that the sales may be at retail, sales of pollution control facilities are exempt from the Retailers' Occupation Tax... This exemption includes not only the pollution control equipment itself, but also replacement parts therefor, but does not extend to chemicals used in any such equipment, to fuel use in operating any such equipment nor to any other tangible personal property which may be used in some way in connection with such equipment, but which is not an integral part of the equipment itself. If the purchaser or his contractor-installer buys an item that could reasonably qualify for exemption as a pollution control facility for use as a pollution control facility, the purchaser or his contractor-installer should certify this intended use of the item to the seller in order to relieve the seller of the duty of collecting and remitting the tax on the sale, but the purchaser who is buying the item in question allegedly for his use as a pollution control facility will be held liable for the tax by the Department if it is found that such purchaser does not use the item as a pollution control facility. 86 III. Adm. Code 130.335(a).

# **Relevant Cases**

- 1. Beelman Truck Company v. Cosentino, 624 N.E.2d 454 (1993).
- 2. Central Illinois Public Service Company v. Department of Revenue, 609 N.E.2d 222 (1987).

3. Shred Pax Corporation v. Department of Revenue, 559 N.E.2d 492 (1990).

# Request for Ruling - Issue

Based upon the facts and relevant law outlined above, the Company seeks a ruling to determine whether the pollution control facilities exemption applies to the tangible personal property purchased for use in its landfill operations.

# **Discussion**

The Company has installed several subsystems, which together constitute a system designed to reduce and eliminate the release of contaminants into groundwater and into the air. This system, and the component parts therein, are consistent with the requirements of the pollution control facilities exemption provided under Section 130.335(a) of the Illinois Administrative Code. As such, the Company requests confirmation of its belief that this system and their corresponding components qualify for the exemption.

In addition to the Company's specific systems, such as the leachate collection system, the overall pollution control process requires maintenance of the landfill and these systems. Maintenance includes excavation, continuous spreading and compacting of waste, covering waste on a daily basis, cleaning the landfill disposal site, and other measures to prevent the formation and release of contaminants. Without such maintenance the systems would fail and allow the release of contaminants into ground water and into the atmosphere.

In order to install and maintain these systems, the Company purchased the items of tangible personal property listed below. The Company purchased the equipment to achieve its objective of reducing and/or eliminating air and water pollution. The regulation exempts pollution control equipment that is intended for the primary purpose of eliminating, preventing, or reducing air and water pollution. The Company believes the equipment listed below satisfies this requirement.

### **Bulldozers and Excavator**

The bulldozers are used to cover waste material and when necessary to grade clay liner to satisfy IEPA requirements. The Department has released several informal rulings that state that bulldozers purchased for the primary purpose covering waste material would qualify for the pollution control facilities exemption. Since the Company uses its bulldozers to cover waste, the Company believes that bulldozers should qualify for the pollution control facilities exemption.

The excavator is used along with the bulldozers to cover waste material, and to provide clay for the liner systems. This being the case, the Company believes that the excavator should also qualify for the pollution control exemption. The Department has

issued one ruling, Letter No. 90-0057, that states that an excavator could qualify for the pollution control exemption if it is used primarily to cover waste materials.

# **Trucks**

The trucks are used as part of the Company's overall pollution control system designed to reduce and eliminate air and water pollution. The trucks are used with the scrapers and hoes to cover waste material, and provide clay for the liner systems. In addition, the trucks are used transport excavated materials such as clay from one location at the disposal site to another.

The Illinois Appellate Court has ruled that the pollution control facilities exemption can apply to trucks. In *Beelman Truck Company v. Cosentino*, 624 N.E.2d 454 (1993), the court ruled that a pickup truck used to transport equipment used to contain spills, was exempt under the pollution control facilities exemption. The court distinguished the case from *Central Illinois Public Service Company v. Department of Revenue*, 609 N.E.2d 222 (1987) by noting that the taxpayer in Central purchased the equipment for the sole purpose of transporting hazardous waste. The court found that the taxpayer in *Beelman* purchased the trucks as part of its system to prevent and reduce potential pollution.

The Company believes its trucks should qualify for the pollution control facilities exemption since the trucks, similar to the trucks in Beelman, were purchased as part of its overall system rather than for the sole purpose of transporting material.

# Compactors

The Company's compactors are used to compact waste material to reduce the volume of landfill waste and to minimize potential liquid infiltration, which would lead to the formation of leachate. Without the compactor, the risk of releasing contaminants into groundwater would be increased. The compactor is an integral part of the Company's pollution control system since the compactor substantially reduces the risk of groundwater contamination, thereby reducing the risk of harm to human, plant, and animal life, and property.

### Loader

The loader is used solely to load, unload, and deploy synthetic materials used at the landfill. These materials are required in order for the Company to operate the landfill. The loader is also used to place stone in the leachate and gas removal systems. The stones must be used in order for the systems to function. Since the stones could not be placed in the leachate and gas system without the loader it is critical to the Company's pollution control system that the loader be used. This being the case, the Company believes that the loader is an integral part of the Company's pollution control system.

# **Tractors**

The tractors are used to mow and seed the landfills cover. Grass is grown on the top of the landfill cover as part of the final cover system. The grass on the cover traps water, preventing it from seeping into the ground leading to leachate formation. The grass on top of the landfill must be maintained in order to prevent water from entering the landfill, thus preventing erosion into adjacent waterways. The tractors therefore are an integral part of the Company's overall pollution control system, specifically, the leachate control system, and final cover system. Without the tractors the release of leachate into groundwater would be significantly increased. The release of such a contaminant would be detrimental to human, plant or animal life, or to property.

# **Water Truck**

An integral element of the landfill's leakage protection system is the installation of the liner. The liner is used at both the bottom of the landfill and the top of the landfill in the landfill cover. It is critical to the pollution control system that the liner reaches an exact level of density. The liner's density level must be maintained in order to prevent leachate from leaking through the bottom of the landfill, and over the top of the landfill. The Company uses the water truck to moisten the liner in order to attain density requirements necessary to prevent leakage. The liner would be in-effective if the water truck was not used to achieve the exact density level. As a result, leachate would leak from the landfill and contaminate ground water. Therefore, the water truck is an integral component of the Company's overall pollution control system.

# Sweeper

The sweeper is used to remove dirt and other debris from the landfill disposal site. The sweeper allows the Company to reduce the potential for such contaminants to be released into the atmosphere, and thus causing air pollution. The sweeper is a crucial component of the Company's overall pollution control system since it reduces potential air pollution that may be caused by the operation of the landfill. This being the case, the Company believes that the sweeper qualifies for the pollution control facilities exemption.

# **Water Pumps and Compressor**

The water pumps and the compressor are used as part of the Company's leachate control system. The compressor operates the pumps. The pumps are used to remove leachate from the landfill. If the leachate were allowed to remain in the landfill, the leachate would contaminate groundwater, which would be offensive to human, plant or animal life, or to property. Thus, the compressor and water pumps should qualify for the pollution control facilities exemption since this equipment is used to prevent water pollution.

# Flare and Blowers

The flares and blowers are used as part of the Company's landfill gas collection system. These items are used to combust the landfill gas condensate. Without these items the gas would escape through the liner, causing the gas to be released into the atmosphere. Therefore, the flares and blowers should qualify for the pollution control facilities exemption since they are used to prevent air pollution, which would be offensive to human, plant or animal life.

We respectfully request that the department issue a ruling in regards to the Company's equipment. The undersigned is not aware of any authorities beyond those mentioned above that are relevant to the Company's conclusions.

The Company is not currently involved in an audit or litigation related to these matters with the Illinois Department of Revenue. The Company has not previously submitted these issues to the Department.

We have enclosed executed Powers of Attorney authorizing the undersigned to represent the Company on this matter. If a disposition other than a favorable ruling is contemplated, a conference is requested.

We appreciate your time in considering and responding to the issues raised in this correspondence. If any additional information is needed, please do not hesitate to contact me at ####.

In your letter dated May 17, 1999 that was received by our office on May 21, 1999, you stated as follows:

This letter is in reference to our document for exemption of sales tax that was submitted on our behalf by Price Waterhouse Coopers dated October 30, 1998. We wanted to clarify that the equipment that is referenced in that document is used greater than fifty percent of the time for pollution control as defined in the letter.

We interpret your follow-up letter to mean that each piece of the equipment referenced in your letter is used in the manner described greater than fifty percent of time that the equipment is used.

The phrase "pollution control facilities" means "any system, method, construction, device, or appliance appurtenant thereto sold or used or intended for the primary purpose of eliminating, preventing or reducing air and water pollution as the term pollution is defined in the Environmental Protection Act or for the primary purpose of treating, pretreating, modifying or disposing of any potential solid, liquid or gaseous pollutant which if released without such treatment, pretreatment, modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property." See the enclosed copy of 86 Ill. Adm. Code 130.335.

**BULLDOZERS AND EXCAVATOR** 

Bulldozers that are used primarily (over 50% of the time) to cover waste material in a landfill in order to prevent that waste from polluting the surrounding area will qualify for the pollution control facilities exemption. Based upon the representations in your letter, the bulldozers referenced in your letter qualify for the pollution control facilities exemption.

Similarly, excavators that are used primarily (over 50% of the time) to cover waste material in a landfill in order to prevent that waste from polluting the surrounding area will qualify for the pollution control facilities exemption. Based upon the representations in your letter, the excavator referenced in your letter qualifies for the pollution control facilities exemption.

## **TRUCKS**

The information in your letter indicates that the use of the trucks is to haul clay, cover materials, and excavated materials at the disposal site. We believe that trucks used primarily (over 50% of the time) in a landfill to haul clay to form a barrier to prevent pollution of groundwater or to haul cover to be spread over the waste material to prevent air or groundwater pollution will qualify for the pollution control facilities exemption. Please note that we believe that trucks which are used primarily (over 50% of the time) for removing excavated material at a landfill do not qualify for the pollution control facilities exemption. If the trucks referenced in your letter are used primarily (over 50% of the time) to haul clay to form a barrier to prevent pollution of groundwater or to haul cover to be spread over the waste material to prevent air or groundwater pollution, those trucks will qualify for the pollution control facilities exemption.

# **COMPACTORS**

It is the Department's view that compactors that are used to compact waste material at landfills are primarily used to compact the waste in order to allow more waste material to be deposited at that landfill. The Department believes that the potential to reduce groundwater contamination is not the primary use of the compactors and they do not qualify for the pollution control facilities exemption.

# **LOADER**

Your letter states that the loader is "used solely to load, unload, and deploy synthetic materials used at the landfill." Then you also state that the loader is also used to place stone in the leachate and gas removal systems and that the loader is critical to the pollution control system because of the placement of the stones. We are somewhat confused by your statement regarding the loader being used to place stone in the leachate and gas removal systems which contradicts your other statement that the loader is used "solely" in regards to synthetic materials. If the loader is used primarily (over 50% of the time) in building, or placing stone in, the leachate and gas systems, the loader will qualify for the pollution control facilities exemption.

# **TRACTORS**

The tractors referenced in your letter are used to both seed the ground cover (grass) and also to mow the ground cover. We do not believe that tractors which are used primarily to mow the grass on top of landfill are being used in a manner that qualifies for the pollution control facilities exemption.

If the tractors are used primarily (over 50% of the time) to seed the ground cover at a landfill to prevent water from entering the landfill and creating groundwater pollution, those tractors qualify for the pollution control facilities exemption.

# WATER TRUCK

If it is necessary to use water to moisten a landfill liner in order to prevent leachate from penetrating the liner and if a water truck is used primarily (over 50% of the time) to provide water for the liner in order to prevent pollution of groundwater, the water truck would qualify for the pollution control facilities exemption. Based upon the representations in your letter, the water truck referenced in your letter qualifies for the pollution control facilities exemption.

## **SWEEPER**

If a sweeper is used primarily (over 50% of the time) to remove waste material from the landfill disposal site so that such waste material does not cause air pollution or pollution of the surrounding area, the sweeper would qualify for the pollution control facilities exemption. Based upon the representations in your letter, the sweeper referenced in your letter qualifies for the pollution control facilities exemption.

### WATER PUMPS AND COMPRESSOR

If the water pumps and compressor are used primarily (over 50% of the time) to remove leachate from the landfill in order to prevent pollution of groundwater, the water pumps and compressor would qualify for the pollution control facilities exemption. Based upon the representations in your letter, the water pumps and compressor referenced in your letter qualify for the pollution control facilities exemption.

# FLARES AND BLOWERS

If flares and blowers are used primarily (over 50% of the time) to combust the offensive gases from the landfill in order to prevent release of those gases into the atmosphere, the flare and blowers would qualify for the pollution control facilities exemption. Based upon the representations in your letter, the flares and blowers referenced in your letter qualify for the pollution control facilities exemption.

The facts upon which this ruling are based are subject to review by the Department during the course of any audit, investigation, or hearing and this ruling shall bind the Department only if the material facts as recited in this ruling are correct and complete. This ruling will cease to bind the Department if there is a pertinent change in statutory law, case law, rules or in the material facts recited in this ruling.

I hope this information is helpful. If you have further questions related to the Illinois sales tax laws, please contact the Department's Taxpayer Information Division at (217) 782-3336.

ST 99-0023-PLR Page 12 May 24, 1999

> Terry D. Charlton Associate Counsel

TDC:msk Enc.